

REMARKS

Claims 1-18 and 20-25 are pending in the present application. Applicants elected to prosecute claims 5-15 and 20-23. Claims 1-4, 16-18, 24-25 are withdrawn. Therefore, claims 5-15 and 20-23 are pending in the present application. Claims 5, 9, 12, 20, and 23 have been amended to address informalities.

Claim Objections

Claims 5-15 and 20-23 are objected to due to informalities. Applicants have amended claim 5 by spelling out the full word for “DC”.

Claim Rejections 35 USC §112

Claims 5-8, 12-15, 20-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants respectfully traverse this rejection.

The Examiner argues that it is unclear if the Applicants are claiming an “apparatus” or a “method.” The claim language addresses the Examiner’s concerns. For example, claim 5 calls for a “**method**” for DC feed control for a line card, whereas claim 12 is directed to an “**apparatus**” that includes a digital signal processor and a circuitry. Thus, based on the plain language, claim 5 is directed to a method, and claim 12 is directed to an apparatus. Similarly, the plain language of independent claims 20 and 23 indicates that these claims are directed to an “apparatus.” As such, notwithstanding the Examiner’s rejection, these claims are fully compliant with Section 112.

Claim Rejections 35 USC §102

Claims 5-15 and 12-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,926,544 (*Zhou*). Applicants respectfully traverse this rejection.

The Examiner makes the same rejection that was made and retracted nearly four years ago by the previous Examiner (Jeffery Harold). Like Examiner Singh now argues, Examiner Harold argued in 2004 that **Zhou** anticipates claims 5-15 and 12-23. *See* Office Action, June 9, 2004. The Applicants pointed out (for reasons once again explained below) to Examiner Harold that Zhou was not an anticipating reference. *See* Response, 7-30-2004. After thoroughly considering the Applicants' arguments, Examiner Harold correctly acknowledged in a May 2, 2005 Office Action that the pending claims were, in fact, allowable over **Zhou**. Instead of rehashing arguments that have been previously advanced and withdrawn by Examiner Harold, Applicants respectfully urge Examiner Singh to allow the pending claims.

Claim 5 is directed to a method for DC feed control for a line card. The method comprises determining if the line card is operating in a current limit region of a DC feed curve; synthesizing a curve in the current limit region of the DC feed curve; determining a loop voltage based on the synthesized curve; and applying the loop voltage to the subscriber line.

The Examiner argues that **Zhou** anticipates claim 5. The Applicants respectfully disagree, and maintain that **Zhou** at least does not teach synthesizing a curve in the current limit region of the DC feed curve and determining a loop voltage based on the synthesized curve. And, consequently, because **Zhou** does not teach determining a loop voltage based on the synthesized curve, it also does not, and cannot teach, applying the loop voltage (which is calculated based on the synthesized curve) to the subscriber line.

Figure 3 of the patent application shows a traditional DC feed curve employed by conventional line cards for DC feed control. The system described in **Zhou** also uses this type of DC feed curve, as shown in Figure 4 of **Zhou**. For reasons more fully described in the patent application, one or more embodiments of the present invention adjust DC feed to the subscriber

line based on a curve synthesized (e.g., artificial curve) in the current limit region, as shown by line 405 in Figure 4 of the instant application. This “synthesized” curve is calculated, in one embodiment, using the method described in Figure 6 of the present application. As can be seen in Figure 4 of *Zhou*, there is no synthesization of a curve in the current limit region; instead, the curve defined 402 is used to define the upper limit of the loop during operation and curve 404 is used to define the lower limit.

The text relied upon by the Examiner, namely the text between col. 4, line 64 and col. 6, line 28, does not describe the “synthesizing a curve” feature of claim 5. Rather, the cited text generally describes the graph of Figure 4, and the general operation of the device in Figure 3. Additionally, the cited text also does not teach or disclose determining a loop voltage based on the synthesized curve or applying the loop voltage (which is calculated based on the synthesized curve) to the subscriber line. Accordingly, for at least these reasons, independent claim 5, and its dependent claims, is allowable. Moreover, independent claims 9, 12, 20, and 23 also call for the “synthesization” feature that is completely missing from *Zhou*. As such, these claims, and the claims depending therefrom, are also allowable for at least this reason.

In view of reasons presented above, the pending claims are allowable. As such, reconsideration of the present application is respectfully requested, and a Notice of Allowance is respectfully solicited.


If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Houston, Texas

telephone number (713) 934-4064 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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